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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.  |
|--|-------------|----------------------|---------------------|-------------------|
| 10/733,472   | 12/12/2003  | Yasuyuki Sakai       | 118061              | 8818              |
| 25944  | 7590        | 12/04/2006           | EXAMINER            |                   |
| <b>OLIFF &amp; BERRIDGE, PLC</b><br>P.O. BOX 19928<br>ALEXANDRIA, VA 22320 |             |                      |                     | FLANIGAN, ALLEN J |
|  |             | ART UNIT             |                     | PAPER NUMBER      |
|  |             |                      |                     | 3744              |

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                   |                 |
|------------------------------|-------------------|-----------------|
| <b>Office Action Summary</b> | Application No.   | Applicant(s)    |
|                              | 10/733,472        | SAKAI, YASUYUKI |
|                              | Examiner          | Art Unit        |
|                              | Allen J. Flanigan | 3744            |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 October 2006.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3 and 5-9 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 5-7 is/are allowed.  
 6) Claim(s) 1-3, 8, and 9 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al.

Please see the comments made in regard to the above rejection in the previous Office action.

Claim 9 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Inoue et al.

Please see the comments made in regard to the above rejection in the previous Office action.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. in view of Ohara et al.

Please see the comments made in regard to the above rejection in the previous Office action.

Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

Applicants argue that Inoue et al. does not show end portions extending from the tube ends in a direction perpendicular to the stacking direction, forming inlet and outlet headers. Inoue et al. clearly show such end portions (note the ends of the exemplary tube shown in Fig. 22 in which openings 48 are

formed). Applicants also argue that Inoue et al. do not show "the end portion (of the headers) being equipped with a diaphragm portion deformed in the stacking direction." Note elastic sleeve portions 500, 600 of Inoue et al. that read on the claimed diaphragm portions. Applicant asserts that "the elastic sleeve portions" are not diaphragm portions. The term "diaphragm portion" as used in the claim is clearly broad enough to encompass any flexible wall member capable of elastic displacement to maintain a seal despite movement of the ports 48 in adjacent tubes. There may be differences between the integrally formed diaphragm portion shown in Fig. 9 of the specification and the sleeves of Inoue et al., but the claims fail to point them out. Indeed, the applicant's own specification states that

Here, the diaphragm may be a plurality of coaxial rings. However, any known structure which can deform along the stacking direction may be employed. (emphasis added).

Thus, the claims fail to distinguish over Inoue et al.

Claims 5-7 are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Allen J. Flanigan  
Primary Examiner  
Art Unit 3744

AJF